July xx, 2000 Certified Mail # Z 029 877 xxx

Steve Nied, Environmental Engineer
Jupiter Aluminum Corporation
1745 – 165th Street
Hammond, IN 46320

Re: Second Administrative Amendment 089-12405-00201
To Part 70 permit T089-5838-00201

Dear Mr. Nied:

Jupiter Aluminum Corporation was issued a Part 70 Operating Permit on March 4, 1998 for a Secondary Aluminum Production Plant. An application to modify the source was received on May 26, 2000. The minor source modification approved (modification to Reverb Furnace #2) requires an amendment to the Part 70 permit. Pursuant to the provisions of 326 IAC 2-7-11 the permit is hereby administratively amended as follows:

Proposed Changes:

The following changes were agreed to and made as the Second Administrative Amendment (089-12405-00201) for this source (~~strikeout~~ added to show what was deleted and bold added to show what was added):

(1) In Section A, Source Summary, A.2, Emission Units and Pollution Control Equipment Summary, unit (7), on page 7 of 52, changes as follows to modify the descriptive information for Aluminum Reverberatory Furnace No. 2 (MS-1A):

This unit has a maximum design rate of ~~28~~ **40** million Btu/hr heat input and is natural gas fired only. The maximum rate of scrap aluminum feed to this furnace is ~~7.5~~ **15** tons per hour with a 95% melt recovery rate (~~6.75~~ **14.25** tons per hour). Particulate emissions generated during the melting process are primarily controlled by ~~a Wheelabrator Baghouse (BHS-6)~~ **an American Air Filter Baghouse (BHS-7)** which is rated at 99% control efficiency.

Normally, furnace~~s~~ 2 ~~and 6 are controlled by~~ **is controlled by** Baghouse ~~6~~ **BHS-7, furnace 6 is controlled by Baghouse BHS-6**, and furnace 7 is controlled by Baghouse ~~5~~ **BHS-5**. However, during maintenance or other circumstances as necessary, all three furnaces can be vented to either baghouse **BHS-6 or BHS-7.**

(2) In Section D.3, Facility Operation Conditions (page 33 of 52), descriptive information for Reverb Furnace #2 in the facility description box changes as follows:

Three (3) Aluminum Reverberatory Furnaces No. 2, 6, and 7:

(7) Aluminum Reverberatory Furnace No. 2 (MS-1A)
This unit has a maximum design rate of ~~28~~ **40** million Btu/hr heat input and is natural gas fired only. The maximum rate of scrap aluminum feed to this furnace is ~~7.5~~ **15** tons per hour with a 95% melt recovery rate (~~6.75~~ **14.25** tons per hour). Particulate emissions generated during the melting process are primarily controlled by ~~a Wheelabrator Baghouse (BHS-6)~~ **an American Air Filter Baghouse (BHS-7**) which is rated at 99% control efficiency.

Normally, furnace~~s~~ 2 ~~and 6 are controlled by~~ **is controlled by** Baghouse ~~6~~ **BHS-7, furnace 6 is controlled by Baghouse BHS-6**, and furnace 7 is controlled by Baghouse ~~5~~ **BHS-5**. However, during maintenance or other circumstances as necessary, all three furnaces can be vented to either baghouse **BHS-6 or BHS-7.**

This revises descriptive information where the revision will not trigger a new applicable requirement or violate a permit term, 326 IAC 2-7-11 (8).

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact this Department at (219) 853-6306.

Sincerely,

Ronald L. Novak, Director
Hammond Department of Environmental Management
Air Pollution Control Division

cc: Cheryl Newton, Chief Program Evaluation Section, U.S.E.P.A., Region V
Mindy Hahn, Permits Administration, IDEM-OAM

RH

ENCLOSURES

PART 70 OPERATING PERMIT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
and
HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Jupiter Aluminum Corporation
1745 - 165th Street
Hammond, Indiana 46320

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T089-5838-00201	
Original Issued by: Felicia R. George, Assistant Commissioner Office of Air Management	Issuance Date: March 4, 1998

First Minor Source Modification: 089-11098-00201 and
First Administrative Amendment: 089-11158-00201 Issuance Date: August 26, 1999
Second Minor Source Modification: 089-12401-00201 Issuance Date: July xx, 2000

Second Administrative Amendment: 089-12405-00201	Pages Affected: 7 and 33
Issued by: _____ Ronald L. Novak, Director Hammond Department of Environmental Management	Issuance Date: August xx, 2000

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) and Hammond Department of Environmental Management, and presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a Secondary Aluminum Production Plant.

Responsible Official:	Steve Nied, Environmental / Process Engineer
Source Address:	1745 - 165th Street, Hammond, Indiana 46320
Mailing Address:	(same)
SIC Code:	3353 - Aluminum Sheet, Plates, & Foil (Secondary Aluminum Processing)
County Location:	Lake County
County Status:	Nonattainment for TSP, PM10 (moderate), SO2, NO2, & Ozone (severe)
Source Status:	Part 70 Permit Program Major Source under PSD and Emission Offset Rules;

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

Jupiter Aluminum Corporation is a secondary aluminum processing plant which only includes smelting/refining. Jupiter Aluminum does not pretreat scrap received at the plant. The scrap is received from various sources, in various forms and is warehoused until processing.

The source consists of the following permitted emission units and pollution control devices:

(1) Cleaver Brooks Boiler (BS-10) (Stack ID BS-10.1)

This boiler has a maximum design rate of 6 million Btu/hr heat input and is natural gas fired only. The unit is used to provide steam for the casters.

(2) Annealing Furnace No. 1 (AS-3) (Stack ID AS-3.1 and 3.2)

This unit has a maximum design rate of 9 million Btu/hr heat input and is natural gas fired only. The unit is used to stress-relieve rolled aluminum strip coils. There are no pollution control equipment associated with this facility.

(3) Annealing Furnace No. 2 (AS-4) (Stack ID AS-4.1, 4.2, 4.3 and 4.4)

This unit has a maximum design rate of 16 million Btu/hr heat input and is natural gas fired only. The unit is used to stress-relieve rolled aluminum strip coils. There are no pollution control equipment associated with this facility.

(4) Annealing Furnace No. 3 (AS-5) (Stack ID AS-5.1, 5.2, 5.3, and 5.4)

This unit has a maximum design rate of 16 million Btu/hr heat input and is natural gas fired only. The unit is used to stress-relieve rolled aluminum strip coils. There are no pollution control equipment associated with this facility.

(5) Annealing Furnace No. 4 (AS-6) (Stack ID AS-6.1 and 6.2)

This unit has a maximum design rate of 13.5 million Btu/hr heat input and is natural gas fired only. The unit is used to stress-relieve rolled aluminum strip coils. There are no pollution control equipment associated with this facility.

(6) Annealing Furnace No. 5 (AS-7) (Stack ID AS-7.1 and 7.2)

This unit has a maximum design rate of 13.5 million Btu/hr heat input and is natural gas fired only. The unit is used to stress-relieve rolled aluminum strip coils. There are no pollution control equipment associated with this facility.

(7) Aluminum Reverberatory Furnace No. 2 (MS-1A)

This unit has a maximum design rate of 40 million Btu/hr heat input and is natural gas fired only. The maximum rate of scrap aluminum feed to this furnace is 15 tons per hour with a 95% melt recovery rate (14.25 tons per hour). Particulate emissions generated during the melting process are primarily controlled by an American Air Filter Baghouse (BHS-7) which is rated at 99% control efficiency.

A Carborundum Baghouse (BHS-5) is used as a stand-by control unit. Baghouses (BHS-6) and (BHS-5) share a common spark arrestor from which the common radiant cooling ductwork lead to a common header to the baghouses. A Lime Injection System is used on both baghouses to precoat the bags and protect from acid decay. The maximum quantity of lime injected through the system is 70 pounds per day.

Normally, furnace 2 is controlled by Baghouse BHS-7, furnace 6 is controlled by Baghouse BHS-6, and furnace 7 is controlled by Baghouse BHS-5. However, during maintenance or other circumstances as necessary, all three furnaces can be vented to either baghouse BHS-6 or BHS-7.

(8) Aluminum Reverberatory Furnace No. 6 (MS-1E)

This unit has a maximum design rate of 40 million Btu/hr heat input and is natural gas fired only. The maximum rate of scrap aluminum feed to this furnace is 15 Tons per hour with a 90% melt recovery rate (13.5 Tons per hour). Particulate emissions generated during the melting process are primarily controlled by a Wheelabrator Baghouse (BHS-6) which is rated at 99% control efficiency.

(9) Aluminum Reverberatory Furnace No. 7 (MS-1F)

This unit has a maximum design rate of 6 million Btu/hr heat input and is natural gas fired only. The maximum rate of scrap aluminum feed to this furnace is 1.8 Tons per hour with a 90% melt recovery rate (1.62 Tons per hour). Particulate emissions generated during the melting process are primarily controlled by a Carborundum Baghouse (BHS-5) which is rated at 99% control efficiency.

(10) Aluminum Reverberatory Furnace No. 3 (MS-1B) (Stack ID MS-1B)

This unit has a maximum design rate of 20 million Btu/hr heat input and is natural gas fired only. The maximum rate of scrap aluminum feed to this furnace is 3.9 Tons per hour with a 90% melt recovery rate (3.5 Tons per hour). Emissions generated during the melting process are controlled by a Thermal Afterburner which is rated at 99% control efficiency.

(11) Aluminum Reverberatory Furnace No. 4 (MS-1C) (Stack ID MS-1C)

This unit has a maximum design rate of 20 million Btu/hr heat input and is natural gas fired only. The maximum rate of scrap aluminum feed to this furnace is 3.9 Tons per hour with a 90% melt recovery rate (3.5 Tons per hour). Emissions generated during the melting process are controlled by a Thermal Afterburner which is rated at 99% control efficiency.

(12) Aluminum Reverberatory Furnace No. 5 (MS-1D) (Stack ID MS-1D)

This unit has a maximum design rate of 14 million Btu/hr heat input and is natural gas fired only. The maximum rate of scrap aluminum feed to this furnace is 3.3 Tons per hour with a 90% melt recovery rate

(3.0 Tons per hour). Emissions generated during the melting process are controlled by a Thermal Afterburner which is rated at 99% control efficiency.

(13) Holding Furnace (HS-2) (stack ID HS-2)

This furnace has a maximum design rate of 10 million Btu/hr heat input and is natural gas fired only. The unit is used to stabilize molten metal temperature.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source does not include any insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21).

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because it is a major source, as defined in 326 IAC 2-7-1(22).

A.5 Prior Permit Conditions Superseded [326 IAC 2]

The terms and conditions of this permit incorporate all the current applicable requirements for all emission units located at this source, and supersede all terms and conditions in all registrations and permits, including construction permits, issued prior to the date of issuance of this permit. All terms and conditions in such registrations and permits are no longer in effect.

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [326 IAC 2-1-10] [IC 13]

(a) Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7.

(b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-1-3.2 or 326 IAC 2-7-15.

B.2 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.3 Permit Term [326 IAC 2-7-5(2)]

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

B.4 Enforceability [326 IAC 2-7-7(a)]

(a) All terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM and HDEM.

(b) Unless otherwise stated, terms and conditions of this permit, including any provisions to limit the source's potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and citizens under the Clean Air Act.

(c) All terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by the Hammond Department of Environmental Management.

B.5 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.6 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.8 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

(b) The Permittee shall furnish to IDEM - OAM and HDEM, within a reasonable time, any information that IDEM - OAM and HDEM, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.

(c) Upon request, the Permittee shall also furnish to IDEM - OAM and HDEM copies of records required to be kept by this permit. For information claimed to be confidential, the Permittee shall furnish such records IDEM - OAM and HDEM along with a claim of confidentiality under 326 IAC 17. If requested by IDEM - OAM, or the U.S. EPA, the Permittee shall furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

(a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit constitutes a violation of the Clean Air Act and is grounds for:

(1) Enforcement action;

(2) Permit termination, revocation and reissuance, or modification; or for

(3) Denial of a permit renewal application.

(b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B.10 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]

(a) Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, on the attached Certification Form, with each submittal.

(c) A responsible official is defined in 326 IAC 2-7-1(34).

B.11 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM - OAM and HDEM on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining compliance of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM - OAM and HDEM may require to determine the compliance status of the source.

B.12 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission units and associated emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM - OAM and HDEM upon request and shall be subject to review and approval by IDEM - OAM and HDEM.

B.13 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM - OAM and HDEM within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

IDEM
Telephone Number: 1-800-451-6027 (ask for Office of Air Management, Compliance Section),
or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

HDEM
Telephone Number: 219-853-6306
Facsimile Number: 219-853-6343

(5) For each emergency lasting one (1) hour or more, the Permittee submitted notice, either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(33).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM - OAM and HDEM may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9) be revised in response to an emergency.

(f) Failure to notify IDEM - OAM and HDEM by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.14 Permit Shield [326 IAC 2-7-15]

(a) Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided either of the following:

(1) The applicable requirements are included and specifically identified in this permit;

(2) IDEM - OAM and HDEM, in acting on the Part 70 permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the Part 70 permit includes the determination or a concise summary thereof.

(b) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application.

(c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement, IDEM - OAM and HDEM shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

(f) This permit shield is not applicable to modifications eligible for group processing until after IDEM - OAM and HDEM has issued the modifications. [326 IAC 2-7-12(c)(7)]

(g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM - OAM or HDEM has issued the modification. [326 IAC 2-7- 12(b)(8)]

B.15 Multiple Exceedances [326 IAC 2-7-5(1)(E)]

Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

B.16 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

within ten (10) calendar days from the date of the discovery of the deviation.

(b) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent.

(c) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)]

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM - OAM or HDEM determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM - OAM, or HDEM to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM - OAM, or HDEM at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM - OAM and HDEM may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.18 Permit Renewal [326 IAC 2-7-4]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM - OAM and HDEM, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

(b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]

(1) A timely renewal application is one that is:

(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM - OAM and HDEM on or before the date it is due. [326 IAC 2-5-3]

(2) If IDEM - OAM or HDEM, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

(c) Right to Operate After Application for Renewal [326 IAC 2-7-3]

If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM - OAM and HDEM, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM - OAM and HDEM, any additional information identified as being needed to process the application.

(d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]

If IDEM - OAM and HDEM fail to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.19 Administrative Permit Amendment [326 IAC 2-7-11]

(a) An administrative permit amendment is a Part 70 permit revision that makes changes of the type specified under 326 IAC 2-7-11(a).

(b) An administrative permit amendment may be made by IDEM - OAM or HDEM, consistent with the procedures specified under 326 IAC 2-7-11(c).

(c) The Permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.20 Minor Permit Modification [326 IAC 2-7-12]

(a) A permit modification is any revision to this permit that cannot be accomplished as an administrative permit amendment under 326 IAC 2-7-11.

(b) Minor modification to this permit shall follow the procedures specified under 326 IAC 2-7-12(b), except as provided by 326 IAC 2-7-12(c).

(c) An application requesting the use of minor modification procedures shall meet the requirements of 326 IAC 2-7-12(b) and shall include the information required in 326 IAC 2-7-12(b)(3)(A) through (E).

(d) The Permittee may make the change proposed in its minor permit modification application immediately after it files such application provided that the change has received any approval required by 326 IAC 2-1. After the Permittee makes the change allowed under minor permit modification procedures, and until IDEM - OAM and HDEM takes any of the actions specified in 326 IAC 2-7-12(b)(6)(A) through (C), the Permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this period, the Permittee need not comply with the existing permit terms and conditions it seeks to modify. If the Permittee fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against it. [326 IAC 2-7-12(b)(7)]

B.21 Significant Permit Modification [326 IAC 2-7-12(d)]

(a) Significant modification procedures shall be used for applications requesting permit modifications that do not qualify as minor permit modifications or as administrative amendments.

(b) Every significant change in existing monitoring permit terms or conditions and every relaxation of reporting or record keeping permit terms or conditions of this permit shall be considered significant.

(c) Nothing in 326 IAC 2-7-12(d) shall be construed to preclude the Permittee from making changes consistent with 326 IAC 2-7 that would render existing permit compliance terms and conditions irrelevant.

(d) Significant modifications of this permit shall meet all requirements of 326 IAC 2-7, including those for application, public participation, review by affected states, review by the U.S. EPA, and availability of the permit shield, as they apply to permit issuance and renewal.

B.22 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)]
[326 IAC 2-7-12 (b)(2)]

(a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.23 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(b)]

The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a) and the following additional conditions:

(a) For each such change, the required written notification shall include a brief description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

(b) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).

B.24 Operational Flexibility [326 IAC 2-7-20]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any approval required by 326 IAC 2-1 has been obtained;

(3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

and

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM - OAM and HDEM in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

(b) For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM - OAM, HDEM or U.S. EPA is required.

(e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.25 Construction Permit Requirement [326 IAC 2]

Except as allowed by Indiana P.L. 130-1996 Section 12, as amended by P.L. 244-1997, modification, construction, or reconstruction shall be approved as required by and in accordance with 326 IAC 2.

B.26 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of IDEM or HDEM identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM - OAM, HDEM, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.
[326 IAC 2-7-6(6)]

B.27 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-7-11]

Pursuant to 326 IAC 2-1-6 and 326 IAC 2-7-11:

(a) In the event that ownership of this source is changed, the Permittee shall notify IDEM - OAM, Permits Branch and HDEM, within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the Permittee and the new owner.

(b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-7-11.

(c) IDEM - OAM and HDEM shall reserve the right to issue a new permit.

B.28 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

(a) The Permittee shall pay annual fees to IDEM - OAM and HDEM within thirty (30) calendar days of receipt of a billing, or in a time period consistent with the fee schedule established in 326 IAC 2-7-19.

(b) Failure to pay may result in administrative enforcement action, or revocation of this permit.

(c) If the Permittee does not receive a bill from IDEM - OAM, thirty (30) calendar days before the due date, the Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee. The applicable fee is due April 1 of each year.

B.29 Enhanced New Source Review [326 IAC 2]

The requirements of the construction permit rules in 326 IAC 2 are satisfied by this permit for the modification to Aluminum Reverberatory Furnace No. 6 as listed in section A.2.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Major Source

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-3 (Emission Offset), this source is a major source.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:

(a) Visible emissions shall not exceed an average of twenty percent (20%) opacity in twenty- four (24) consecutive readings, as determined in 326 IAC 5-1-4.

(b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

C.4 Incineration [326 IAC 4-2][326 IAC 9-1-2])

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

C.5 Fugitive Dust Emissions [326 IAC 6-1-11.1]

The Permittee shall be in violation of 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), if the opacity of fugitive particulate emissions exceeds ten percent (10%). Compliance with this limitation shall be determined by 40 CFR 60, Appendix A, Method 9.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

All air pollution control equipment listed in this permit shall be operated at all times that the emission unit vented to the control equipment is in operation, as described in Section D of this permit.

C.7 Stack Height [326 IAC 1-7]

(a) The Permittee shall comply with the provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

(b) Any change in an applicable stack shall require prior approval from IDEM - OAM.

C.8 Asbestos Abatement Projects - Accreditation [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

Prior to the commencement of any demolition or renovation activities, the Permittee shall use an Indiana accredited asbestos inspector to inspect thoroughly the affected facility or part of the facility where the demolition or renovation operation will occur for the presence of asbestos, including Category I and Category II nonfriable asbestos containing material. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.9 Performance Testing [326 IAC 3-2.1]

(a) All testing shall be performed according to the provisions of 326 IAC 3-2.1 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM - OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

no later than thirty-five (35) days before the intended test date.

(b) All test reports must be received by IDEM - OAM and HDEM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM - OAM and HDEM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee shall notify:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

in writing, no more than ninety (90) days after receipt of this permit, with full justification of the reasons for the inability to meet this date and a schedule which it expects to meet. If a denial of the request is not received before the monitoring is fully implemented, the schedule shall be deemed approved.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.11 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.

(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.12 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.13 Pressure Gauge Specifications

Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (2%) of full scale reading.

C.14 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) asbestos removal or demolition start date;

(B) removal or demolition contractor; or

(3) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and to:

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

(e) Procedures for Asbestos Emission Control

The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Indiana Accredited Asbestos Inspector

The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on February 21, 1991.

(b) If the ERP is disapproved by IDEM - OAM and HDEM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP. If after this time, the Permittee does not submit an approvable ERP then IDEM - OAM and HDEM shall supply such a plan.

(c) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(d) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(e) Upon direct notification by IDEM - OAM and HDEM that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

(f) Upon direct notification by IDEM - OAM or HDEM, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present in more than the threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

(a) Submit:

(1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or

(2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and

(3) A verification to IDEM - OAM and HDEM that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.

(b) Provide annual certification to IDEM - OAM and HDEM that the Risk Management Plan is being properly implemented.

C.17 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5(3)]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this permit;

(3) The Compliance Monitoring Requirements in Section D of this permit;

(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM - OAM and HDEM upon request and shall be subject to review and approval by IDEM - OAM and HDEM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :

(A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and

(B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.

(c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;

(3) An automatic measurement was taken when the process was not operating; or

(4) The process has already returned to operating within "normal" parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.18 Actions Related to Noncompliance Demonstrated by a Stack Test

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM - OAM and HDEM within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM - OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM - OAM and HDEM within thirty (30) days of receipt of the notice of deficiency. IDEM - OAM and HDEM reserve the authority to use enforcement activities to resolve noncompliant stack tests.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM - OAM and HDEM that retesting in one-hundred and twenty (120) days is not practicable, IDEM - OAM and HDEM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.19 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

(a) The Permittee shall submit a certified, annual emission statement that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

(1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);

(2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.

(b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM - OAM and HDEM on or before the date it is due.

C.20 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

(a) With the exception of performance tests conducted in accordance with Section C - Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.

(b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.

(c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

(d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

(e) At its discretion, IDEM - OAM and HDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

(f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.21 General Record Keeping Requirements [326 IAC 2-7-5(3)(B)]

(a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location and available within four (4) hours upon verbal request of an IDEM - OAM or HDEM representative, for a minimum of three (3) years. They may be stored elsewhere for the remaining two (2) years providing they are made available within thirty (30) days after written request.

(b) Records of required monitoring information shall include, where applicable:

(1) The date, place, and time of sampling or measurements;

(2) The dates analyses were performed;

(3) The company or entity performing the analyses;

(4) The analytical techniques or methods used;

(5) The results of such analyses; and

(6) The operating conditions existing at the time of sampling or measurement.

(c) Support information shall include, where applicable:

(1) Copies of all reports required by this permit;

(2) All original strip chart recordings for continuous monitoring instrumentation;

(3) All calibration and maintenance records;

(4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

(d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.22 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) To affirm that the source has met all the requirements stated in this permit the source shall submit a Quarterly Compliance Report. Any deviation from the requirements and the date(s) of each deviation must be reported.

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and to:

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by

the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM - OAM and HDEM on or before the date it is due.

(d) Unless otherwise specified in this permit, any report required shall be submitted within thirty (30) days of the end of the reporting period.

(e) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

(1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or

(2) An emergency as defined in 326 IAC 2-7-1(12); or

(3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.

(4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.

(f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.

(g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

Stratospheric Ozone Protection

C.23 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

(1)	Cleaver Brooks Boiler (BS-10) (Stack ID BS-10.1) This boiler has a maximum design rate of 6 million Btu/hr heat input and is natural gas fired only. The unit is used to provide steam for the casters.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter (PM) and Particulate Matter less than 10 microns in diameter (PM10)

Pursuant to Construction Permit No. 00528 and Operation Permit No. 00703, this unit is limited to PM and PM10 emissions of 0.003 lbs/MMBtu and 0.018 lbs/hr each.

Compliance Determination Requirements

D.1.2 Testing Requirements [326 IAC 2-7-6(1)]

Testing of this facility is not specifically required by this permit. However, this does not preclude testing requirements on this facility under 326 IAC 2-1-4(f) and 326 IAC 2-7-6(1).

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.3 There are no specific compliance monitoring requirements applicable to this facility.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.4 Record Keeping Requirements

There are no record keeping requirements for this facility.

D.1.5 Reporting Requirements

There are no reporting requirements for this facility.

SECTION D.2 FACILITY OPERATION CONDITIONS

Five (5) Annealing Furnaces No. 1, 2, 3, 4, and 5:

(2) Annealing Furnace No. 1 (AS-3) (Stack ID AS-3.1 and 3.2)
This unit has a maximum design rate of 9 million Btu/hr heat input and is natural gas fired only. The unit is used to stress-relieve rolled aluminum strip coils. There are no pollution control equipment associated with this facility.

(3) Annealing Furnace No. 2 (AS-4) (Stack ID AS-4.1, 4.2, 4.3 and 4.4)
This unit has a maximum design rate of 16 million Btu/hr heat input and is natural gas fired only. The unit is used to stress-relieve rolled aluminum strip coils. There are no pollution control equipment associated with this facility.

(4) Annealing Furnace No. 3 (AS-5) (Stack ID AS-5.1, 5.2, 5.3, and 5.4)
This unit has a maximum design rate of 16 million Btu/hr heat input and is natural gas fired only. The unit is used to stress-relieve rolled aluminum strip coils. There are no pollution control equipment associated with this facility.

(5) Annealing Furnace No. 4 (AS-5) (Stack ID AS-6.1 and 6.2)
This unit has a maximum design rate of 13.5 million Btu/hr heat input and is natural gas fired only. The unit is used to stress-relieve rolled aluminum strip coils. There are no pollution control equipment associated with this facility.

(6) Annealing Furnace No. 5 (AS-7) (Stack ID AS-7.1 and 7.2)
This unit has a maximum design rate of 13.5 million Btu/hr heat input and is natural gas fired only. The unit is used to stress-relieve rolled aluminum strip coils. There are no pollution control equipment associated with this facility.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate Matter less than 10 microns in diameter (PM10)

Pursuant to 326 IAC 6-1-10.1(Lake County PM10 Emission Requirements), subsection (h), these combustion sources shall fire natural gas only and emissions of particulate matter less than ten microns in diameter (PM10) from these facilities shall be limited as follows:

Unit ID:	PM10 Emissions Limit	
	(lbs/MMBtu)	(lbs/hr)
Annealing Furnace No. 1	0.003	0.040
Annealing Furnace No. 2	0.003	0.048
Annealing Furnace No. 3	0.003	0.048
Annealing Furnace No. 4	0.003	0.041
Annealing Furnace No. 5	0.003	0.041

D.2.2 Particulate Matter (PM)

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), the PM emissions limits for these facilities shall be set equal to the PM10 emissions limits.

Compliance Determination Requirements

D.2.3 Testing Requirements [326 IAC 2-7-6(1)]

Testing of this facility is not specifically required by this permit. However, this does not preclude testing requirements on this facility under 326 IAC 2-1-4(f) and 326 IAC 2-7-6(1).

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.4 Visible Emissions Notations

(a) Daily visible emission notations of each Annealing Furnace stack exhaust shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.5 Record Keeping Requirements

(a) To document compliance with Condition D.2.4, the Permittee shall maintain records of daily visible emission notations of each Annealing Furnace stack exhaust.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.6 Reporting Requirements

There are no reporting requirements for this facility.

SECTION D.3 FACILITY OPERATION CONDITIONS

Three (3) Aluminum Reverberatory Furnaces No. 2, 6, and 7:

(7) Aluminum Reverberatory Furnace No. 2 (MS-1A)
This unit has a maximum design rate of 40 million Btu/hr heat input and is natural gas fired only. The maximum rate of scrap aluminum feed to this furnace is 15 Tons per hour with a 95% melt recovery rate (14.25 Tons per hour). Particulate emissions generated during the melting process are primarily controlled by an American Air Filter Baghouse (BHS-7) which is rated at 99% control efficiency.

A Carborundum Baghouse (BHS-5) is used as a stand-by control unit. Baghouses (BHS-6) and (BHS-5) share a common spark arrestor from which the common radiant cooling ductwork lead to a common header to the baghouses. A Lime Injection System is used on both baghouses to precoat the bags and protect from acid decay. The maximum quantity of lime injected through the system is 70 pounds per day.

Normally, furnace 2 is controlled by Baghouse BHS-7, furnace 6 is controlled by Baghouse BHS-6, and furnace 7 is controlled by Baghouse BHS-5. However, during maintenance or other circumstances as necessary, all three furnaces can be vented to either baghouse BHS-6 or BHS-7.

(8) Aluminum Reverberatory Furnace No. 6 (MS-1E)
This unit has a maximum design rate of 20 million Btu/hr heat input and is natural gas fired only. The maximum rate of scrap aluminum feed to this furnace is 8.3 Tons per hour with a 90% melt recovery rate (7.5 Tons per hour). Particulate emissions generated during the melting process are primarily controlled by a Wheelabrator Baghouse (BHS-6) which is rated at 99% control efficiency.

(9) Aluminum Reverberatory Furnace No. 7 (MS-1F)
This unit has a maximum design rate of 6 million Btu/hr heat input and is natural gas fired only. The maximum rate of scrap aluminum feed to this furnace is 1.8 Tons per hour with a 90% melt recovery rate (1.62 Tons per hour). Particulate emissions generated during the melting process are primarily controlled by a Carborundum Baghouse (BHS-5) which is rated at 99% control efficiency.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Particulate Matter less than 10 microns in diameter (PM10)

Pursuant to 326 IAC 6-1-10.1(Lake County PM10 Emission Requirements), subsection (d), emissions of particulate matter less than ten microns in diameter (PM10) from Aluminum Reverberatory Furnaces No. 2 and 6 shall be limited as follows:

Unit ID:	PM10 Emissions Limit	
	(lbs/ton)	(lbs/hr)
Aluminum Reverberatory Furnace No. 2	0.130	1.137
Aluminum Reverberatory Furnace No. 6	0.060	0.970

D.3.2 Particulate Matter (PM)

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), the PM emissions limits from Aluminum Reverberatory Furnaces No. 2 and 6 shall be set equal to the PM10 emissions limits.

D.3.3 Particulate Matter less than 10 microns in diameter (PM10)

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended) and Construction Permit No. 00568, the PM10 emissions limits from the Aluminum Reverberatory Furnace No. 7 shall be limited to 0.060 lbs/ton and 0.970 lbs/hr.

D.3.4 Particulate Matter (PM)

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended) and Construction Permit No. 00568, the PM emissions limits from the Aluminum Reverberatory Furnace No. 7 shall be limited to 0.03 gr/dscf and 4.770 lbs/hr.

D.3.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and its control equipment.

Compliance Determination Requirements

D.3.6 Testing Requirements [326 IAC 2-7-6(1)]

A compliance stack test shall be performed to demonstrate compliance with the combined PM10 limit of 3.077 lbs/hr (combined limits from furnaces 2, 6, and 7) at the exhaust of one Baghouse controlling all three furnaces. The initial test shall be performed using baghouse (BHS-6). Thereafter, the baghouses shall be alternated for each compliance test. The Lime Injection System shall also be in operation for a minimum of fifteen (15) minutes during each run of the compliance stack test. The test shall be completed within twenty-four (24) months of issuance of this permit and repeated no less than once every 5 years thereafter. Testing shall be performed in accordance with 326 IAC 3-2.1 using methods acceptable to the Commissioner.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.3.7 Particulate Matter (PM) and Particulate Matter less than 10 microns in diameter (PM10)

Pursuant to Hammond Air Quality Control Ordinance No. 3522 (as amended), either Baghouse (BHS-6) or (BHS-5) shall be in operation at all times when any one of the three furnaces are in operation.

D.3.8 Visible Emissions Notations

(a) Daily visible emission notations of each Baghouse stack exhaust shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.3.9 Parametric Monitoring

The Permittee shall record the total static pressure drop across each baghouse (BHS-6) and (BHS-5) used in conjunction with these facilities when any one of the three furnaces are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the

pressure drop across each baghouse shall be maintained within the range of **1.0 and 5.0** inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM - OAM and HDEM and shall be calibrated at least once every six (6) months.

D.3.10 Baghouse Inspections

An inspection shall be performed each month of all bags in each baghouse when venting to the atmosphere. A baghouse inspection shall be performed within one month of redirecting vents to the atmosphere and every month thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.3.11 Broken Bag or Failure Detection

In the event that bag failure has been observed:

(a) The affected compartments shall be shut down immediately until the failed units have been repaired or replaced.

(b) Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.12 Record Keeping Requirements

(a) To document compliance with Condition D.3.8, the Permittee shall maintain records of daily visible emission notations of each baghouse stack exhaust.

(b) To document compliance with Condition D.3.9 through D.3.11, the Permittee shall maintain the following:

(1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:

(A) Inlet and outlet differential static pressure; and

(B) Cleaning cycle: frequency and differential pressure

(2) Documentation of all response steps implemented, per event .

(3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.

(4) Quality Assurance/Quality Control (QA/QC) procedures.

(5) Operator standard operating procedures (SOP).

(6) Manufacturer's specifications or its equivalent.

(7) Equipment "troubleshooting" contingency plan.

(8) Documentation of the dates vents are redirected.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.13 Reporting Requirements

There are no reporting requirements for this facility.

SECTION D.4 FACILITY OPERATION CONDITIONS

Three (3) Aluminum Reverberatory Furnaces No. 3, 4, and 5, each equipped with a thermal afterburner:

(10) Aluminum Reverberatory Furnace No. 3 (MS-1B) (Stack ID MS-1B)
This unit has a maximum design rate of 20 million Btu/hr heat input and is natural gas fired only. The maximum rate of scrap aluminum feed to this furnace is 3.9 Tons per hour with a 90% melt recovery rate (3.5 Tons per hour). Emissions generated during the melting process are controlled by a Thermal Afterburner which is rated at 99% control efficiency.

(11) Aluminum Reverberatory Furnace No. 4 (MS-1C) (Stack ID MS-1C)
This unit has a maximum design rate of 20 million Btu/hr heat input and is natural gas fired only. The maximum rate of scrap aluminum feed to this furnace is 3.9 Tons per hour with a 90% melt recovery rate (3.5 Tons per hour). Emissions generated during the melting process are controlled by a Thermal Afterburner which is rated at 99% control efficiency.

(12) Aluminum Reverberatory Furnace No. 5 (MS-1D) (Stack ID MS-1D)
This unit has a maximum design rate of 14 million Btu/hr heat input and is natural gas fired only. The maximum rate of scrap aluminum feed to this furnace is 3.3 Tons per hour with a 90% melt recovery rate (3.0 Tons per hour). Emissions generated during the melting process are controlled by a Thermal Afterburner which is rated at 99% control efficiency.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Particulate Matter less than 10 microns in diameter (PM10)

Pursuant to 326 IAC 6-1-10.1(Lake County PM10 Emission Requirements), subsection (d), emissions of particulate matter less than ten microns in diameter (PM10) from these facilities shall be limited as follows:

Unit ID:	PM10 Emissions Limit	
	(lbs/ton)	(lbs/hr)
Aluminum Reverberatory Furnace No. 3	0.145	0.510
Aluminum Reverberatory Furnace No. 4	0.145	0.510
Aluminum Reverberatory Furnace No. 5	0.142	0.430

D.4.2 Particulate Matter (PM)

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), the PM emissions limits from these facilities shall be set equal to the PM10 emissions limits.

D.4.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and its control equipment.

Compliance Determination Requirements

D.4.4 Testing Requirements [326 IAC 2-7-6(1)]

A compliance stack test shall be performed on one of the three Aluminum Reverberatory Furnaces No. 3, 4, or 5 to demonstrate compliance with the PM10 limit. The furnace tested shall be alternated among the three furnaces. The test shall be completed within twenty-four (24) months of issuance of this permit and repeated no less than once every 5 years thereafter. Testing shall be performed in accordance with 326 IAC 3-2.1 using methods acceptable to the Commissioner.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.4.5 Particulate Matter (PM) and Particulate Matter less than 10 microns in diameter (PM10)

Pursuant to Hammond Air Quality Control Ordinance No. 3522 (as amended), each thermal afterburner shall be in operation at all times when its associated furnace is in operation.

D.4.6 Visible Emissions Notations

(a) Daily visible emission notations of each furnace exhaust shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.4.7 Parametric Monitoring

The Permittee shall record the thermal afterburner operating temperature used in conjunction with each furnace when the furnace is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the temperature of the afterburner shall be maintained at or above 1600 °F or a minimum temperature established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the temperature is below the minimum value for any one reading.

The instrument used for determining the temperature shall be subject to approval by IDEM - OAM and HDEM and shall be calibrated at least once every six (6) months.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.8 Record Keeping Requirements

(a) To document compliance with Condition D.4.6, the Permittee shall maintain records of daily visible emission notations of each furnace stack exhaust.

(b) To document compliance with Condition D.4.7, the Permittee shall maintain the following:

(1) Daily records of the thermal afterburner operating temperature during normal operation

(2) Documentation of all response steps implemented, per event .

(3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.

(4) Quality Assurance/Quality Control (QA/QC) procedures.

(5) Operator standard operating procedures (SOP).

(6) Manufacturer's specifications or its equivalent.

(7) Equipment "troubleshooting" contingency plan.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.4.9 Reporting Requirements

There are no reporting requirements for this facility.

SECTION D.5 FACILITY OPERATION CONDITIONS

(13) Holding Furnace (HS-2) (stack ID HS-2)
This furnace has a maximum design rate of 10 million Btu/hr heat input and is natural gas fired only. The unit is used to stabilize molten metal temperature.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 Particulate Matter (PM) and Particulate Matter less than 10 microns in diameter (PM10)

Pursuant to Hammond Air Quality Control Ordinance No. 3522 (as amended) and Operation Permit No. 00694, this unit is limited to PM and PM10 emissions of 0.029 lbs/hr and 0.125 tons/yr each.

Compliance Determination Requirements

D.5.2 Testing Requirements [326 IAC 2-7-6(1)]

Testing of this facility is not specifically required by this permit. However, this does not preclude testing requirements on this facility under 326 IAC 2-1-4(f) and 326 IAC 2-7-6(1).

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.5.3 There are no specific compliance monitoring requirements applicable to this facility.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.5.4 Record Keeping Requirements

There are no record keeping requirements for this facility.

D.5.5 Reporting Requirements

There are no reporting requirements for this facility.

SECTION D.6 FACILITY CONDITIONS

The major modification of Aluminum Reverberatory Furnace No. 6 involves the reconstruction of the furnace. After construction, furnace No. 6 will have the following specifications:

This unit has a maximum design rate of 40 million Btu/hr heat input and is natural gas fired only. The maximum rate of scrap aluminum feed to this furnace is 15 Tons per hour with a 90% melt recovery rate (13.5 Tons per hour). Particulate emissions generated during the melting process are primarily controlled by a Wheelabrator Baghouse (BHS-6) which is rated at 99% control efficiency.

A Carborundum Baghouse (BHS-5) is used as a stand-by control unit. Baghouses (BHS-6) and (BHS-5) share a common spark arrestor from which the common radiant cooling ductwork lead to a common header to the baghouses. A Lime Injection System is used on both baghouses to precoat the bags and protect from acid decay. The maximum quantity of lime injected through the system is 70 pounds per day.

Normally, furnaces 2 and 6 are controlled by Baghouse 6 and furnace 7 is controlled by Baghouse 5. However, during maintenance or other circumstances as necessary, all three furnaces can be vented to either baghouse.

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

Construction Conditions [326 IAC 2-1-3.2]

General Construction Conditions

D.6.1 This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

Effective Date of the Permit

D.6.2 Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.

D.6.3 Pursuant to 326 IAC 2-1-9(b) (Revocation of Permits), IDEM - OAM and HDEM may revoke this section of the approved permit if construction is not commenced within eighteen (18) months after receipt of this permit or if construction is suspended for a continuous period of one (1) year or more.

D.6.4 All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

D.6.5 This condition will supersede Conditions in section D.3 of this permit concerning Aluminum Reverberatory Furnace No. 6.

Operation Conditions

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.6 Particulate Matter less than 10 microns in diameter (PM10)

Pursuant to 326 IAC 6-1-10.1(Lake County PM10 Emission Requirements), subsection (d), emissions of particulate matter less than ten microns in diameter (PM10) from the Aluminum Reverberatory Furnace No. 6 shall be limited to 0.060 lbs/ton and 0.970 lbs/hr.

D.6.7 Particulate Matter (PM)

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), the PM emissions limit shall be set equal to the PM10 emissions limits.

D.6.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control equipment.

Compliance Determination Requirements

D.6.9 Testing Requirements [326 IAC 2-7-6(1)]

A compliance stack test shall be performed to demonstrate compliance with the combined PM10 limit of 3.077 lbs/hr (combined limits from furnaces 2, 6, and 7) at the exhaust of one Baghouse controlling all three furnaces. The initial test shall be performed using baghouse (BHS-6). Thereafter, the baghouses shall be alternated for each compliance test. The Lime Injection System shall also be in operation for a minimum of fifteen (15) minutes during each run of the compliance stack test. The test shall be completed within twenty-four (24) months of issuance of this permit and repeated no less than once every 5 years thereafter. Testing shall be performed in accordance with 326 IAC 3-2.1 using methods acceptable to the Commissioner.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.6.10 Particulate Matter (PM) and Particulate Matter less than 10 microns in diameter (PM10)

Pursuant to Hammond Air Quality Control Ordinance No. 3522 (as amended), either Baghouse (BHS-6) or (BHS-5) shall be in operation at all times when any one of the three furnaces (2, 6, or 7) is in operation.

D.6.11 Visible Emissions Notations

(a) Daily visible emission notations of each Baghouse stack exhaust shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.6.12 Parametric Monitoring

The Permittee shall record the total static pressure drop across each baghouse (BHS-6) and (BHS-5) used in conjunction with these facilities when any one of the three furnaces are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across each baghouse shall be maintained within the range of **1.0 and 5.0** inches of water or a

range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM - OAM and HDEM and shall be calibrated at least once every six (6) months.

D.6.13 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags in each baghouse when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.6.14 Broken Bag or Failure Detection

In the event that bag failure has been observed:

(a) The affected compartments shall be shut down immediately until the failed units have been repaired or replaced.

(b) Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.15 Record Keeping Requirements

(a) To document compliance with Condition D.6.11, the Permittee shall maintain records of daily visible emission notations of each baghouse stack exhaust.

(b) To document compliance with Condition D.6.12 through D.6.14, the Permittee shall maintain the following:

(1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:

(A) Inlet and outlet differential static pressure; and

(B) Cleaning cycle: frequency and differential pressure

(2) Documentation of all response steps implemented, per event .

(3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.

(4) Quality Assurance/Quality Control (QA/QC) procedures.

(5) Operator standard operating procedures (SOP).

(6) Manufacturer's specifications or its equivalent.

(7) Equipment "troubleshooting" contingency plan.

(8) Documentation of the dates vents are redirected.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.6.16 Reporting Requirements

There are no reporting requirements for this facility.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION
and
HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Jupiter Aluminum Corporation
Source Address: 1745 - 165th Street, Hammond, Indiana 46320
Mailing Address: (same)
Part 70 Permit No.: T089-5838-00201

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

_ Annual Compliance Certification Letter

_ Emergency/Deviation Occurrence Reporting Form

_ Test Result (specify)

_ Report (specify)

_ Notification (specify)

_ Other (specify)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

and

HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
5925 Calumet Avenue
Hammond, Indiana 46320
Phone: 219-853-6306
Fax: 219-853-6343

PART 70 OPERATING PERMIT
EMERGENCY/DEVIATION OCCURRENCE REPORT

Source Name: Jupiter Aluminum Corporation
Source Address: 1745 - 165th Street, Hammond, Indiana 46320
Mailing Address: (same)
Part 70 Permit No.: T089-5838-00201

This form consists of 2 pages **Page 1 of 2**

Check either No. 1 or No. 2

__ 1. This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Management (OAM), within four (**4**) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7- 16

__ 2. This is a deviation, reportable per 326 IAC 2-7-5(3)(c)
- The Permittee must submit notice in writing within ten (**10**) calendar days

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency/Deviation:

Describe the cause of the Emergency/Deviation:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency/Deviation started: Date/Time Emergency/Deviation was corrected:
Was the facility being properly operated at the time of the emergency/deviation? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other: Estimated amount of pollutant(s) emitted during emergency/deviation: Describe the steps taken to mitigate the problem: Describe the corrective actions/response steps taken: Describe the measures taken to minimize emissions: If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by:
Title/Position:
Date:
Phone:

Attach a signed certification to complete this report..

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION
and
HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

PART 70 OPERATING PERMIT
QUARTERLY COMPLIANCE REPORT

Source Name: Jupiter Aluminum Corporation
Source Address: 1745 - 165th Street, Hammond, Indiana 46320
Mailing Address: (same)
Part 70 Permit No.: T089-5838-00201

Months: _____ to _____ Year: _____

This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly. Any deviation from the requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify zero in the column marked "No Deviations".

LIST EACH COMPLIANCE REQUIREMENT EXISTING FOR THIS SOURCE:

Requirement (eg. Permit Condition D.1.3)	**Number of Deviations**	**Date of each Deviations**	**No Deviations**

Form Completed by:

Title/Position:

Date:

Phone:

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION
and
HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Baghouse Static Pressure Drop Record Keeping Form

Source Name: Jupiter Aluminum Corporation
Source Address: 1745 - 165th Street, Hammond, Indiana 46320
Mailing Address: (same)
Part 70 Permit No.: T089-5838-00201
Required Range: 1 to 4 inches of water

Month: _____ Year: _____

Day	Baghouse (BHS-6) ΔP (in H2O)	Baghouse (BHS-5) ΔP (in H2O)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
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31		

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION
and
HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Thermal Afterburner Temperature Record Keeping Form

Source Name: Jupiter Aluminum Corporation
Source Address: 1745 - 165th Street, Hammond, Indiana 46320
Mailing Address: (same)
Part 70 Permit No.: T089-5838-00201
Requirement: 1600 °F or higher

Month: _____ Year: _____

Day	Furnace No. 3 Afterburner Temp. (°F)	Furnace No. 4 Afterburner Temp. (°F)	Furnace No. 5 Afterburner Temp. (°F)
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
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27			
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31			

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION
and
HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Visible Emissions Notations Record Keeping Form - page 1 of 2

Source Name: Jupiter Aluminum Corporation
Source Address: 1745 - 165th Street, Hammond, Indiana 46320
Mailing Address: (same)
Part 70 Permit No.: T089-5838-00201
Notation: Normal or Abnormal

Month: _____ Year: _____

Day	Annealing Furnace No. 1	Annealing Furnace No. 2	Annealing Furnace No. 3	Annealing Furnace No. 4	Annealing Furnace No. 5
	Stack AS-3	Stack AS-4	Stack AS-5	Stack AS-6	Stack AS-7
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION
and
HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Visible Emissions Notations Record Keeping Form - page 2 of 2

Source Name: Jupiter Aluminum Corporation
Source Address: 1745 - 165th Street, Hammond, Indiana 46320
Mailing Address: (same)
Part 70 Permit No.: T089-5838-00201
Notation: Normal or Abnormal

Month: _____ Year: _____

Day	Wheelabrator Baghouse	Carborundum Baghouse	Reverberatory Furnace No. 3	Reverberatory Furnace No. 4	Reverberatory Furnace No. 5
Stack ID	BHS-6	BHS-5	MS-1B	MS-1C	MS-1D
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
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22					
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24					
25					
26					
27					
28					
29					
30					
31					

Hammond Department of Environmental Management
Air Pollution Control Division

and

Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD) for a Part 70
Minor Source Modification

Source Background and Description

Source Name:	Jupiter Aluminum Corporation
Source Location:	1745 – 165th Street, Hammond, IN 46320
County:	Lake
SIC Code:	3353 – Aluminum Sheet, Plate, & Foil
Operation Permit No.:	T089-5838-00201
Operation Permit Issuance Date:	March 4, 1998
Minor Source Modification:	089-12401-00201
Permit Reviewer:	Ronald Holder

The Hammond Department of Environmental Management (HDEM) has reviewed an application from Jupiter Aluminum relating to the modification of Aluminum Melting Furnace #2 including the addition of new baghouse (BHS-7). This not a new source PSD or new construction PSD review.

Modifications include:

(1) An increase of burner capacity from 28 MMBtu/hr to 40 MMBtu/hr with 100% oxygen enrichment for energy efficiency and **near elimination of NOx emissions** and;

(2) An increase of furnace capacity resulting in an increase of production capacity from 7.5 tons per hour to 14 tons per hour and;

(3) The addition of baghouse (BHS-7) to supplement existing baghouse (BHS-6).

History

On May 26, 2000, Jupiter Aluminum submitted an application to the HDEM requesting to upgrade their existing #2 Melting Furnace. They are a major source located in Lake County with the potential to emit twenty-five tons per year of NOx. This modification will result in an increase greater than or equal to fifteen (15) pounds per day of VOCs. Therefore, pursuant to 326 IAC 2-7-10.5 (d)(10), a minor source modification is required.

Existing Approvals

Jupiter Aluminum was issued a Federally Enforceable Part 70 Operating Permit (T089-5838-00201) on March 4, 1998. A minor source modification and an administrative amendment were issued on August 26, 1999 for the addition of two (2) annealing furnaces. This will be the second minor source modification and will result in the second administrative amendment to their Part 70 Permit.

Enforcement Issue

The source has the following enforcement actions pending:

Jupiter was issued a violation letter for failing to stack test two (2) emission points within the twenty-four (24) month period allotted in their Part 70 permit. They have responded with the compliance affidavit, but have not as of this writing submitted the requested test protocols. The emission unit under this review vents to one of the stacks mentioned. This approval may be withheld pending the outcome of the IDEM's enforcement decisions.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temp (^{0}F)
BHS-7	Reverb Furnace #2	30	4'	70,000	170

Recommendation

The staff recommends to the Commissioner that the Minor Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on May 26, 2000. Additional information (baghouse BHS-7) was received on July 14, 2000.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (four (4) pages).

<u>Potential To Emit</u> (Before and After Controls) of Reverb Furnace #2 as it is <u>currently</u> permitted in the existing Title V Permit (see detailed calculations in Appendix A).

Pollutant	Before Controls TPY	After Controls TPY
PM	141.6	**1.42**
PM-10	85.8	**0.86**
SO_2	0.07	0.07
VOC	7.3	7.3
CO	2.5	2.5
NO_x	12.3	12.3

Potential To Emit (Before and After Controls) of Reverb Furnace #2 after the proposed modification (see detailed calculations in Appendix A).

Pollutant	Before Controls TPY	After Controls TPY
PM	268.9	**2.69**
PM-10	162.8	**1.63**
SO_2	0.11	0.11
VOC	13.5	13.5
CO	3.5	3.5
NO_x	negligible	negligible

Potential To Emit of Modification

This table is used to show the PTE of the modification, the PTE is before controls unless the controls are inherent to the process or federally enforceable.

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This is not a new source or a new construction of an emission unit. This table reflects the PTE of the modification before controls or after federally enforceable controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Jupiter Aluminum is an existing Title V source with an issued federally enforceable Title V Permit. The existing PM_{10} SIP limit for Furnace #2 as stated in 326 IAC 6-1-10.1 (d) and in the Title V permit is federally enforceable and will not change because of the modification. Therefore, the air pollution control equipment (baghouse BHS-7) which they use to meet the limit is federally enforceable and required in the permit. Therefore, pursuant to 326 IAC 2-1.1-1, the Potential to Emit of the modification is limited by the physical limitation of the federally enforceable air pollution control equipment.

Pollutant	Potential To Emit (tons/year)
PM	1.27
PM-10	0.77
SO_2	0.04
VOC	6.22
CO	1.05
NO_x	-12.3 *

*100% oxygen enrichment means controlled oxygen supplementation to the natural gas stream sufficient to provide all the oxygen necessary to burn the fuel. This burns hotter, more efficiently, and is economically beneficial to the company. Also, no oxygen is required from the ambient air which contains 79% nitrogen and produces nitrogen oxides (NOx) when used to burn fuel. Negligible nitrogen oxides are emitted after this modification. Hence, nitrogen oxides are reduced by twelve (12) tons due to this modification.

Justification for Modification

Jupiter Aluminum is located in Lake County and has the potential to emit twenty-five tons per year of NOx. This modification will result in an increase greater than or equal to fifteen (15) pounds per day of VOC (6.22 TPY). Therefore, pursuant to 326 IAC 2-7-10.5 (d)(10), a minor source modification will be required. In the existing Title V Permit, only descriptive information for this unit will change. Pursuant to 326 IAC 2-7-11 (8), an administrative amendment will also need to be issued.

County Attainment Status

This source is located in Lake County.

Pollutant	Status
PM-10	Moderate Nonattainment
SO_2	Nonattainment
NO_2	Severe Nonattainment
Ozone	Severe Nonattainment
CO	Attainment
Lead	Attainment

Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as severe nonattainment for ozone.

Source Status

Existing Source PSD or Emissions Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	16.50
PM-10	10.32
SO_2	110.49
VOC	18.10
CO	15.00
NO_x	167.92
HAP (specify)	0

(a) This existing source is a major stationary source because it has a potential to emit oxides of nitrogen that would equal or exceed a rate of twenty-five (25) tons per year in an area classified as severe nonattainment for ozone (Lake County) – 326 IAC 2-3-1 (q)(2), Emission Offset Definitions.

(b) These emissions are based on 1998 Emissions Statement submitted by the source.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The existing control equipment (for PM10) is federally enforceable because it is already required for this existing unit in the existing Part 70 Permit.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
Furnace #2	2.69	1.63	0.11	13.5	3.5	negligible	0

This modification to an existing major stationary source is not major because the emissions increases are less than the Emission Offset significant levels. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

The VOC emissions increases, due to this modification, are below the de minimis levels for a serious or severe ozone non-attainment area because they do not exceed twenty-five (25) tons per year when aggregated on a pollutant specific basis with all other net emissions increases from the source over a five (5) consecutive calendar year period prior to, and including, the year of the modification (see contemporaneous increases, Appendix A).

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this source. This is not a Primary Aluminum Reduction Plant; Subpart S does not apply.

(c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14 and 40 CFR Part 63) applicable to this source. This is not a Primary Aluminum Reduction Plant; Subpart LL does not apply.

State Rule Applicability - Entire Source

326 IAC 1-6-3 (Preventive Maintenance Plan)

Pursuant to 326 IAC 1-6-3 (b), this Department requested a copy of Jupiter's Preventive Maintenance Plan (PMP).

Jupiter submitted their Preventive Maintenance Plan on March 26, 1997. The PMP has been verified to fulfill the requirements of 326 IAC 1-6-3 (Preventive Maintenance Plan).

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of PM-10. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source.

Jupiter Aluminum submits an annual emission statement.

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

Compliance Monitoring Requirements in Jupiter's Title V permit require daily visible emissions notations of all stacks at Jupiter Aluminum. Corrective actions are initiated for any visible emissions.

State Rule Applicability - Individual Facilities

326 IAC 6-1-10.1 (d) (Lake County PM-10 Emissions Requirements)

Pursuant to 326 6-1-10.1, subsection (d), (Lake County PM-10 Emissions Requirements), Reverberatory Furnaces at this source, Numbers 2 through 6, have specific PM-10 limits.

Compliance Determination Requirements in Jupiter's Title V permit require that the baghouse (BHS-6) exhaust be tested for the combined PM_{10} limit for Furnaces 2, 6, and 7 within twenty-four (24) months of the issuance of their permit. Jupiter is currently in violation of this Title V permit condition. Notwithstanding the IDEM's enforcement decisions, and pursuant to 2-1.1-11, Furnace #2 will be required to test after this modification has been completed to determine compliance with the PM_{10} SIP limit.

The existing Compliance Monitoring Requirements in Jupiter's federally enforceable Title V permit require that either baghouse BHS-6 or BHS-5 be in operation at all times when any one of the three furnaces are in operation. This will be modified by amendment to include the new baghouse (BHS-7).

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The existing Compliance Determination and Compliance Monitoring Requirements in Jupiter's Title V permit, Section D.3 for the Reverberatory Furnaces including Reverb Furnace #2 will be amended to include baghouse BHS-7 as a potential exhaust point for stack testing purposes. All other conditions for compliance determination shall remain unchanged and unaffected by this modification.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

None of the listed air toxics will be emitted from this unit or created due to this modification.

Conclusion

The operation of the Aluminum Reverberatory Melting Furnace #2 shall be subject to the conditions of the attached minor source modification 089-12401-00201.

The administrative amendment to the Part 70 permit will only change descriptive information in Section D.3 for the existing Aluminum Reverberatory Furnace #2. This revision does not trigger a new applicable requirement or violate a permit term. All limitations, conditions, and requirements will remain unchanged and in effect.

Second Minor Source Modification 089-12401-00201 and
Second Administrative Amendment 089-12405-00201

Proposed Changes:

The following changes will be made as the Second Administrative Amendment (089-12405-00201) for this source (~~strikeout~~ added to show what was deleted and **bold** added to show what was added):

1. In Section A, Source Summary, A.2, Emission Units and Pollution Control Equipment Summary, unit (7) on page 7 of 52 changes as follows to modify the descriptive information for Aluminum Reverberatory Furnace No. 2 (MS-1A):

   This unit has a maximum design rate of ~~28~~ **40** million Btu/hr heat input and is natural gas fired only. The maximum rate of scrap aluminum feed to this furnace is ~~7.5~~ **15** tons per hour with a 95% melt recovery rate (~~6.75~~ **14.25** tons per hour). Particulate emissions generated during the melting process are primarily controlled by ~~a Wheelabrator Baghouse (BHS-6)~~ **an American Air Filter Baghouse (BHS-7)** which is rated at 99% control efficiency.

   Normally, furnace~~s~~ 2 ~~and 6 are controlled by~~ **is controlled by** Baghouse ~~6~~ **BHS-7, furnace 6 is controlled by Baghouse BHS-6**, and furnace 7 is controlled by Baghouse ~~5~~ **BHS-5**. However, during maintenance or other circumstances as necessary, all three furnaces can be vented to either baghouse **BHS-6 or BHS-7.**

---

2. In Section D.3, Facility Operation Conditions (page 33 of 52), descriptive information for Reverb Furnace #2 in the facility description box changes as follows:

Three (3) Aluminum Reverberatory Furnaces No. 2, 6, and 7: (7) Aluminum Reverberatory Furnace No. 2 (MS-1A) This unit has a maximum design rate of ~~28~~ **40** million Btu/hr heat input and is natural gas fired only. The maximum rate of scrap aluminum feed to this furnace is ~~7.5~~ **15** tons per hour with a 95% melt recovery rate (~~6.75~~ **14.25** tons per hour). Particulate emissions generated during the melting process are primarily controlled by ~~a Wheelabrator Baghouse (BHS-6)~~ **an American Air Filter Baghouse (BHS-7)** which is rated at 99% control efficiency. Normally, furnace~~s~~ 2 ~~and 6 are controlled by~~ **is controlled by** Baghouse ~~6~~ **BHS-7, furnace 6 is controlled by Baghouse BHS-6**, and furnace 7 is controlled by Baghouse ~~5~~ **BHS-5**. However, during maintenance or other circumstances as necessary, all three furnaces can be vented to either baghouse **BHS-6 or BHS-7.**

All other units and conditions of the permit shall remain unchanged and in effect.

ALABAMA POWER LAW (CDS)/EIS CALCULATIONS

EIS Form ss (Excel5)

Jupiter Aluminum Corporation
1745 - 165th Street
Hammond, IN 46320

PLANT ID NO: 089-00201
INSP DATE: 4/25/00
CALC DATE: 7/10/00

Minor Source Modification **089-12401-00201**
Administrative Amendment **089-12405-00201**

CALCULATIONS BY: Ronald Holder

YEAR OF DATA: **review**

NO. OF POINTS: 1

Aluminum Reverberatory Melting Furnace #2 **Before** Modification

****

POINT ID: **005** — Aluminum Reverberatory Melting Furnace #2

CNTRL DEV: Wheelabrator Baghouse (BHS-6)
Backup: Carborundum Baghouse (BHS-5)

MDR (T/hr): **7.5**
YEARLY PROD (T/yr): N/A

STACK ID (DIAM:HEIGHT): (4': 60')
FLOWRATE (ACFM): 70,000
Ts(°F): 170

PERMITTED OPERATING HRS: **8760** hr/yr

SCC NO. 3-04-001-03			POTENTIAL EMISSIONS						ALLOWABLE	
			BEFORE CONTROLS			AFTER CONTROL				
POLLUTANT	EF(LB/T)	CE (%)	(lbs/hr)	(lbs/day)	**(TPY)**	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)
PM	4.3	0.99	32.250	774.000	141.255	0.323	1.413	0.001	0	0
PM10	2.6	0.99	19.500	468.000	85.410	**0.195**	**0.854**	0.000	**1.137**	**4.980**
SOx	0	0	0.000	0.000	0.000	0.000	0.000	N/A	0	0
NOx	0	0	0.000	0.000	0.000	0.000	0.000	N/A	0	0
VOC	0.2	0	1.500	36.000	6.570	1.500	6.570	N/A	0	0
CO	0	0	0.000	0.000	0.000	0.000	0.000	N/A	0	0
LEAD	0	0	0.000	0.000	0.000	0.000	0.000	N/A	0	0

PM10: 326 IAC 6-1-10.1(d)

****

POINT ID: **005** — Reverb Furnace #2 In-Process Fuel Use

(Natural Gas Combustion)

MDC (mmBtu/hr): **28**
MDR (mmcft/hr): **0.028**

HEAT CONTENT (Btu/cft): 1000
QTY BURNED (mmcft/yr): N/A

STACK ID (DIAM:HEIGHT): (4': 60')
FLOWRATE (ACFM): 60000
Ts(°F): 170

PERMITTED OPERATING HRS: **8760** hr/yr

SCC NO. 3-90-006-89			POTENTIAL EMISSIONS					
			BEFORE CONTROl			AFTER CONTROL		
POLLUTANT	EF(lbs/mmcft)	CE (%)	(lbs/hr)	(lbs/day)	**(TPY)**	(lbs/hr)	(TPY)	(gr/dscf)
PM	3	0.99	0.084	2.016	0.368	0.001	0.004	0.000
PM10	3	0.99	0.084	2.016	0.368	0.001	0.004	0.000
SOx	0.6	0	0.017	0.403	0.074	0.017	0.074	N/A
NOx	100	0	2.800	67.200	12.264	2.800	12.264	N/A
VOC	5.8	0	0.162	3.898	0.711	0.162	0.711	N/A
CO	20	0	0.560	13.440	2.453	0.560	2.453	N/A
LEAD	0	0	0.000	0.000	0.000	0.000	0.000	N/A

Minor Source Modification **089-12401-00201**
Administrative Amendment **089-12405-00201**

Aluminum Reverberatory Melting Furnace #2 **After** Modification

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POINT ID: 005 — Aluminum Reverberatory Melting Furnace #2
CNTRL DEV: American Air Filter (BHS-7)
backup: Wheelabrator Baghouse (BHS-6)

MDR (T/hr): **14.25**
YEARLY PROD (T/yr): N/A
PERMITTED OPERATING HRS: **8760** hr/yr

STACK ID (DIAM:HEIGHT): (4': 30')
FLOWRATE (ACFM): 70,000
Ts(°F): 170

SCC NO. 3-04-001-03			POTENTIAL EMISSIONS						ALLOWABLE	
			BEFORE CONTROLS			AFTER CONTROL				
POLLUTANT	EF(LB/T)	CE (%)	(lbs/hr)	(lbs/day)	**(TPY)**	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)
PM	4.3	0.99	61.275	1,470.600	268.385	0.613	2.684	0.001	0	0
PM10	2.6	0.99	37.050	889.200	162.279	**0.371**	**1.623**	0.001	**1.137**	**4.980**
SOx	0	0	0.000	0.000	0.000	0.000	0.000	N/A	0	0
NOx	0	0	0.000	0.000	0.000	0.000	0.000	N/A	0	0
VOC	0.2	0	2.850	68.400	12.483	2.850	12.483	N/A	0	0
CO	0	0	0.000	0.000	0.000	0.000	0.000	N/A	0	0
LEAD	0	0	0.000	0.000	0.000	0.000	0.000	N/A	0	0

PM10: 326 IAC 6-1-10.1(d)

The allowable PM10 SIP limit in the existing federally enforceable Title V Permit

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POINT ID: 005 — Reverb Furnace #2 In-Process Fuel Use
(Natural Gas Combustion)
(100% O2 Enriched)

MDC (mmBtu/hr): **40**
MDR (mmcft/hr): 0.040
HEAT CONTENT (Btu/cft): 1000
QTY BURNED (mmcft/yr): N/A
PERMITTED OPERATING HRS: **8760** hr/yr

STACK ID (DIAM:HEIGHT): (4': 30')
FLOWRATE (ACFM): 70,000
Ts(°F): 170

SCC NO. 3-90-006-89			POTENTIAL EMISSIONS					
			BEFORE CONTROl			AFTER CONTROL		
POLLUTANT	EF(lbs/mmcft)	CE (%)	(lbs/hr)	(lbs/day)	**(TPY)**	(lbs/hr)	(TPY)	(gr/dscf)
PM	3	0.99	0.120	2.880	0.526	0.001	0.005	0.000
PM10	3	0.99	0.120	2.880	0.526	0.001	0.005	0.000
SOx	0.6	0	0.024	0.576	0.105	0.024	0.105	N/A
NOx	**0**	0	0.000	0.000	0.000	0.000	0.000	N/A
VOC	5.8	0	0.232	5.568	1.016	0.232	1.016	N/A
CO	20	0	0.800	19.200	3.504	0.800	3.504	N/A
LEAD	0	0	0.000	0.000	0.000	0.000	0.000	N/A

Due to the use of 100% Oxygen in the system, the NOx emissions are nearly eliminated.

Emissions Increases or Decreases due to the Modification of Reverb Furnace #2.

PERMITTED OPERATING HRS: **8760** hr/yr

		POTENTIAL EMISSIONS						
		BEFORE CONTROL				AFTER CONTROL		
POLLUTANT	CE (%)	(lbs/hr)	(lbs/day)	**(TPY)**		(lbs/hr)	(TPY)	(gr/dscf)
PM	0.99	29.06	697.46	127.29		**0.29**	**1.27**	N/A
PM10	0.99	17.59	422.06	77.03		**0.18**	**0.77**	N/A
SOx	0	0.01	0.17	0.03		**0.01**	**0.03**	N/A
NOx	0	-2.80	-67.20	-12.26		**-2.80**	**-12.26**	* N/A *
VOC	0	1.42	34.07	6.22		**1.42**	**6.22**	N/A
CO	0	0.24	5.76	1.05		**0.24**	**1.05**	N/A
LEAD	0	0.00	0.00	0.00		**0.00**	**0.00**	N/A

Jupiter Aluminum is an existing Title V source with an issued federally enforceable Title V Permit.
The existing PM10 SIP limit for Furnace #2 as stated in 326 IAC 6-1-10.1 (d) and in the Title V Permit is federally enforceable.
Therefore, the air pollution control equipment (baghouse BHS-7) which they use to meet the limit is federally enforceable and required in the permit.
Therefore, pursuant to 326 IAC 2-1.1-1, the Potential to Emit is limited by the physical limitation of the federally enforceable pollution controls.

* **100% oxgen enrichment means oxygen supplementation to the natural gas stream sufficient to provide all the oxygen necessary to burn the fuel.**
Therefore, no oxygen is required from the ambient air which contains 79% nitrogen and produces nitrogen oxides when used to burn fuel.
Negligible nitrogen oxides are emitted after this modification. Hence, nitrogen oxides are reduced by 12 tons due to this modification.

Aluminum Reverberatory Furnace #2 will exhaust to Baghouse (BHS-7).
Stack testing will be required per 2-1.1-11 to demonstrate compliance with the PM10 SIP limit.
The PM10 limit for Aluminum Furnace #2 as stated in 326 IAC 6-1-10.1 (d) and in the current Title V permit is 1.137 lbs/hr.

Minor Source Modification **089-12401-00201**
Administrative Amendment **089-12405-00201**